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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,154	04/22/2004	Takashi Aketa	0171-1087PUS1	5733
2292	7590	11/25/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SCHATZ, CHRISTOPHER	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 11/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/829,154

Applicant(s)

AKETA ET AL.

Examiner

Christopher T. Schatz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 7 and 8 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The invention originally claimed, Group I, drawn to a method, claims 1-7 and 10 is classified in Class 156, subclass 329.

The newly submitted claims 7 and 8, Group II, drawn to a product, is classified in class 280, subclass 728.1

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as laying a pair of unimpregnated base fabric pieces on one another and then impregnating said pieces with silicone rubber.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

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on the merits. Accordingly, claims 7 and 8 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 10 excludes calcium carbonate from the composition used in the process of claim 1. However, no part of the specification states that the composition recited claim 1 is without calcium carbonate. Applicant is claiming an invention not contemplated by the inventor at the time of the application was filed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Takuman et al.

The admitted prior art discloses a method of preparing an air bag, said method comprising: furnishing a pair of base fabric pieces impregnated and/or coated with silicone rubber; laying the pieces one on the other with the coated surfaces of the pieces inside; applying an adhesive silicone rubber composition as a sealer to the peripheral portions of the base fabric pieces; and bonding or stitching peripheral portions of the pieces together to form a bag (page 1, lines 17-30). The admitted prior art is silent as to the elongation and composition of the adhesive. Takuman et al. discloses an addition reaction adhesive for bonding silicone rubber having an elongation at break of at least 1000% (Table 1), said adhesive comprising: an organopolysiloxane containing at least two alkenyl radicals in a molecule; an organohydrogenpolysiloxane containing at least two silicon atom-bonded hydrogen atoms in a molecule; a platinum group metal catalyst (page 2, lines 34-41); an aluminum hydroxide powder (paragraph 0020), and an organopolysiloxane resin having siloxane units containing alkenyl radicals and siloxane units of the formula: $\text{SiO}_{4/2}$ in a molecule (page 2, line 55). Using a silicone rubber adhesive of the disclosed composition is advantageous because, as disclosed by Takuman et al., doing so provides superior adhesion to silicone coated materials (paragraph 0036). Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to use an adhesive with the composition as taught by Takuman et al. above to increase

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adhesion between silicone coated layers in the process of fabricating an air bag as set forth above by the admitted prior art.

As to claim 2, Takuman et al. discloses a method wherein the aluminum hydroxide powder has been surface treated with a surface treating agent selected from the group comprising of fatty acids, resin acids organosilazanes and alkoxysilanes (page 4, lines 30-31). As to claim 5, Takuman et al. discloses a method wherein a silicone rubber adhesive further comprises of an alkoxysilane or a partial hydrolytic condensate thereof (page 4, line 21). As to claims 6 and 7, Takuman et al. discloses a method wherein the composition further comprises an organic titanium compound (paragraph 0021).

6. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Takuman et al. as applied above, and in further view of Simizu et al.

The admitted prior art and Takuman et al. discloses a method as stated above, but the reference is silent as to the particle size of aluminum hydroxide powder. Simizu '140 discloses a polyorganosiloxane adhesive wherein said adhesive comprises surface treated aluminum hydroxide powder with an average particle size of between 0.01 to 50 microns (column 4, lines 44-45). Using aluminum hydroxide powder with said particle size is advantageous because, as disclosed by Simizu, doing so provides for a smooth surface and appearance after curing (column 4, lines 45-47). Additionally, smaller particles are critical to having high elongation and a low modulus (column 4, lines 34-37). Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to use finely divided aluminum hydroxide particles with the above specified particle size as taught by Simizu above such that the method

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disclosed by the admitted prior art and Takuman et al. produces a better bond with higher elongation.

As to claim 10, Simizu discloses an adhesive wherein said adhesive does not include calcium carbonate (column 6, example 1, table 1). Applicant is referred to table 1 in the reference. The table shows comparative examples a and c comprising calcium carbonate and comparative examples b, d, e, f, and g with aluminum hydroxide and no calcium carbonate. In every example without the calcium carbonate, the adhesive has a higher elongation. As such, it would have been obvious to one of ordinary skill in the art to exclude calcium carbonate as taught by Simizu above from the adhesive used in the method disclosed by the admitted prior art and Takuman et al. such that the adhesive has a higher elongation.

Response to Arguments

Applicant's arguments with respect to claims 1-7 and 10 have been considered but are moot in view of the new ground(s) of rejection. Applicant further argues that Takuman does not teach a process of preparing an air bag as explicitly recited in claim 1. Examiner asserts that such a disclosure is not necessary, since the admitted prior art discloses every step of applicant's claimed method with the exception of the specific adhesive. Additionally, Takuman does disclose that the adhesive is to be used for bonding silicone rubber, which is the same material that is bonded together in the method of the instant invention. Thus, the references can properly be combined.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher T. Schatz** whose telephone number is **571-272-1456**. The examiner can normally be reached on 10:00-7:30, Monday -Thursday, 10:00-6:30 Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CTS


STEVEN D. MAKI
PRIMARY EXAMINER
11-21-05